

**REMARKS**

In the last Office Action<sup>1</sup>, the Examiner took the following actions:

objected to the specification and required a new title for this application;

objected to claims 8 and 9 for allegedly failing to be patentably distinct from claim 1;

rejected claims 2 and 3 under 35 U.S.C. § 112, second paragraph; and

rejected claims 1-9, 13, and 14 under 35 U.S.C. § 103(a) as being unpatentable over<sup>2</sup> either U.S. Patent 5,917,798 ("Horimai"), or alternatively over U.S. Patent No. 7,130,092 (the corresponding U.S. patent of WO99/44195, "Horimai II"), in view of U.S. Patent 5,607,799 ("Moerner").

Claims 10-12 stand withdrawn and claims 1-9, 13, and 14 remain under examination.

As a preliminary matter, Applicants respectfully request that the Examiner consider the documents cited in the Information Disclosure Statements (IDSs) filed September 23, 2004, and October 7, 2004. At page 2 of the Office Action, the Examiner contends that these documents are not "prior art."

Regardless of whether or not the cited documents constitute prior art, "once the minimum requirements of 37 C.F.R. 1.97 and 37 C.F.R. 1.98 are met, the Examiner has

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

<sup>2</sup> In the Office Action at page 4, the Examiner indicated that claims 1-9, 13, and 14 were unpatentable over a combination of references including "Horimai et al (cited prior art by applicants[ ])." Applicants believe that the Examiner is referring to U.S. Patent No. 5,917,798 to Horimai et al., listed by Applicants in an Information Disclosure Statement filed on March 10, 2004, with this application. Applicants respectfully request clarification from the Examiner whether he intended to cite to another reference in support of his rejection under 35 U.S.C. § 103(a).

an obligation to consider the information. There is no requirement that the information must be prior art references in order to be considered by the Examiner.” See M.P.E.P. § 609. Since Applicants have met the requirements of 37 C.F.R. §§ 1.97 and 1.98, Applicants respectfully submit that the Examiner should consider the cited documents. Accordingly, Applicants submit copies of the Form(s) PTO 1449 submitted with the September 23<sup>rd</sup> and October 7<sup>th</sup> IDSs and respectfully request that the Examiner indicate his consideration of the documents cited therein.

By this amendment, Applicants have amended the title in a manner consistent with the Examiner’s comments at page 2 of the Office Action. According, Applicants deem this objection addressed and respectfully request that the Examiner withdraw the objection to the title of this application.

Applicants have amended claims 1-3, 8, 9, 13, and 14. Claim 1 is amended to recite “a region in the recording layer, in which the hologram is recorded, is conical.” Independent claims 8, 9, 13, and 14 are also amended in a similar manner as claim 1. Support for the amendments to claims 1, 8, 9, 13, and 14 can be found at, for example, page 6, lines 6-7 of Applicants’ specification. Claim 8 is also amended to recite “an optical density of the remaining part of the recording layer is uniform.” Support for the amendment can be found at, for example, page 9, lines 9-13 of Applicants’ specification.

Claims 8 and 9 are also amended in response to the Examiner’s objection discussed at page 2 of the Office Action. Applicants respectfully disagree with the Examiner’s conclusions regarding claims 8 and 9. In order to advance prosecution, however, Applicants have amended claims 8 and 9 to even more clearly define the

claimed subject matter recited therein. Accordingly, Applicants deem the Examiner's objection to claims 8 and 9 addressed and respectfully request that the Examiner withdraw the objection to claims 8 and 9.

Applicants respectfully traverse the rejection of claims 2 and 3 under 35 U.S.C. § 112, second paragraph. In order to advance prosecution, however, Applicants have also amended claims 2 and 3 to even more clearly define the subject matter recited respectively therein. Claim 2 is amended to recite "wherein the decrease of the optical density . . . is continuous." Claim 3 is amended to recite "wherein the decrease of the optical density . . . is step-by-step." In light of these amendments, Applicants deem the rejection of claims 2 and 3 overcome and, thus, respectfully request that the Examiner reconsider and withdraw the rejection of claims 2 and 3 under 35 U.S.C. § 112, second paragraph.

Applicants respectfully traverse the rejection of claims 1-9, 13, and 14 under 35 U.S.C. § 103(a) because no *prima facie* case of obviousness is established based on the combination of Horimai, Horimai II, and Moerner.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006). Moreover, "in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." USPTO Memorandum from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, page 2.

Claim 1 recites an optical information recording medium including, among other things, “a region in the recording layer, in which the hologram is recorded, is conical.”

The combination of Horimai, Horimai II, and Moerner fail to teach or suggest “a region in the recording layer” that is “conical,” as recited in claim 1. The Examiner acknowledges at page 4 of the Office Action that Horimai and Horimai II merely disclose “holographic record[ing] medium[s]” and do “not specif[y] . . . what the holographic material is.” Instead, the Examiner relies on Moerner to teach these additional elements recited in claim 1.

Moerner does not compensate for the deficiencies of Horimai and Horimai II. Moerner merely teaches “a two-component photorefractive article” and “photorefractive index grating formation using the article and . . . a holographic storage device” (col. 2, lines 21-22, 44-46), but does not teach or suggest “a region in the recording layer” that is “conical,” as recited in claim 1. Accordingly, no *prima facie* case of obviousness is established with respect to claim 1 based on Horimai, Horimai II, and Moerner, because the references, either alone or in combination, fail to teach or suggest each and every element recited in claim 1.

Claims 8, 9, 13, and 14, although of different scope, recite similar elements as claim 1. No *prima facie* case of obviousness is established with respect to claims 8, 9, 13, and 14 based on Horimai, Horimai II, and Moerner for similar reasons as claim 1. Claims 2-7 depend from independent claim 1 and are allowable at least due to their dependence. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-9, 13, and 14 under 35 U.S.C. § 103(a).

In view of the foregoing, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

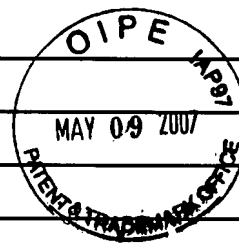
Dated: May 9, 2007

By: Richard V. Burgujian Reg. No. 53,232  
for Reg. No. 31,744

**Attachments:** Copies of Form(s) PTO 1449 included with Information Disclosure Statements filed September 23, 2004, and October 7, 2004, in this application (2 pages).

## INFORMATION DISCLOSURE CITATION

Atty. Docket No.	8411.0002	Appln. No.	10/796,342
Applicant	Hirao et al.		
Filing Date	March 10, 2004	Group:	2655



## U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate

## FOREIGN PATENT DOCUMENTS

		Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

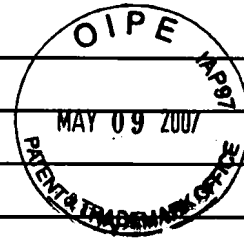
	U.S. Patent Application No. 10/773,323, filed February 9, 2004, to Matsumoto et al.

Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
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OMB No. 0651-0011

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	2004/0180266 A1	9/16/04	Hirao et al.			

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